



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE HONORABLE BOARD OF PATENT APPEALS AND INTERFERENCES

In re the application of: Dwayne Lacey

Ser. No.: 09/935,297

Group Art Unit: 3764

Filed: August 22, 2001

Examiner: DeMille, D.

Confirmation No.: 9672

For: HEAD MASSAGING DEVICE

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REPLY BRIEF

Sir:

The following remarks are in response to the Examiner's Answer dated March 31, 2005.

Numerous errors inherent in the present rejections have already been addressed in the Brief on Appeal, and accordingly those errors are not again addressed here. The following remarks address assertions contained in the Examiner's Answer which were not previously asserted by the U.S. PTO, as well as addressing a new rejection contained in the Examiner's Answer.

- I. The Examiner improperly assumes that the device of Robbins '980 (U.S. Patent No. 6,450,980) would be used in a particular manner not disclosed therein, and bases rejections on structural changes which the Examiner asserts would occur when the device is used in such a manner

There is no disclosure in Robbins '980 which would indicate that the massage device disclosed therein performs a massaging action other than by contacting the coverings 30 on the respective fingers 22, 24, 26 and 28 on the scalp, and there is no indication in Robbins '980 that any portion of the user's head penetrates the massage device, i.e., extends past the coverings 30 in the direction of the handle portion 10.

The Examiner's Answer contains a statement that "[w]hen the device [of Robbins '980] is pressed onto the head, the ends of the fingers would contact the head first and as the fingers expand to encompass the head of the user the fingers would apply pressure to and thus massage the head." (Examiner's Answer, page 3, lines 6-8). There is no disclosure in Robbins '980 which supports this assertion by the Examiner. First, as described in detail in the Brief on Appeal, Robbins '980 does not disclose or suggest that the device disclosed therein has a head receiving space as claimed in the present application, i.e., that the elongated members (fingers) 22, 24, 26 and 28 of Robbins '980 can accommodate a head and/or that the device can be lowered onto a head so that as the head enters a head-receiving space, free ends of the members would apply pressure to the head (as also recited in the claims).

The Examiner, without any basis, asserts that the device disclosed in Robbins '980 includes a head receiving space and then asserts that if a user were to use the Robbins '980 device in the manner in which the device according to the present invention is disclosed as being used, the Robbins device would function in a way similar to the way in which the device of the present invention functions. The Examiner's position requires (1) improperly adding to the disclosure in Robbins '980, without any basis in Robbins '980, so that the device includes features of the device according to the present invention, then (2) assuming that the device is used in the manner in which the device according to the present invention is used, without any basis in Robbins '980, such that the device is structurally modified as a result of such use, and then (3) concluding that the thus modified device would have the characteristics recited in the present claims. Clearly, such an analysis is improper.

Moreover, even if the disclosure in Robbins '980 were modified as improperly suggested by the Examiner and if the device were used in the same manner as is the device according to the present invention, it is not clear that the ends of the fingers of the device according to Robbins '980 would not be pushed completely out of contact with the user's head as the device is pushed onto the head of the user in order to try to accommodate the user's head within the fingers 22, 24, 26 and 28.

The Examiner's Answer also includes a statement that "[t]he Robbins device is intended to be used in the same manner as Applicant's invention." (Examiner's Answer, page 8, lines 1-2). There is no basis whatsoever for this statement by the Examiner. Robbins '980 does not contain any disclosure which suggests that the device disclosed therein is intended to be used in the same manner as the devices of the present invention. This is a blatant example of the Examiner using the Applicant's own invention as prior art against him.

Similarly, the Examiner's Answer contains a statement that "[t]he fingers [of Robbins '980] are designed and intended to form a head receiving space therebetween." (Examiner's Answer, page 8, lines 4-5). Again, there is no basis whatsoever in Robbins '980 for this statement, and Robbins '980 contains no disclosure which suggests that the fingers thereof are designed and/or intended to form a head receiving space.

Likewise, for the same reasons, there is no basis for the statement in the Examiner's Answer that "... the user would be manipulating the shape of the fingers to find the best head receiving shape for a particular individual." (Examiner's Answer, page 8, lines 11-13).

Furthermore, it is respectfully noted that the fact that the fingers 22, 24, 26 and 28 of the Robbins device can be bent does not mean that all possible configurations of those elements, including the orientation recited in the present claims, would have been obvious. Such a rationale is clearly being used by the present Examiner, as evidenced by his position with respect to claims 15 and 30, in particular, where the Examiner's Answer states "[c]learly Robbins teaches the fingers can be bent into any desired configuration. As the device is used the fingers would necessarily have to expand outwardly in order to accommodate the shape of the head." (Examiner's Answer, page 4, lines 7-9). As noted above, there is no disclosure in Robbins '980 which suggests that the fingers 22, 24, 26 and 28 ever accommodate the shape of a head. Nevertheless, and despite the Applicants having repeatedly pointed this out, the Examiner applies the rationale that if one were to wish to accommodate the user's head in the manner that the device of the present invention does, the device according to Robbins '980 could be modified by bending the fingers 22, 24, 26 and 28 so as to provide a shape which

would best accommodate the head. A particularly blatant example of the Examiner's improper approach is shown in the sentence which reads "[i]f one were to bend the fingers in a shape to best accommodate the shape of the head, they would comprehend the claim language." (Examiner's Answer, page 4, lines 12-14).

II. The device disclosed in Rabin '799 does not include fingers having the features recited in the present claims

The Examiner is also distorting the disclosure in Rabin '799. It has been unclear during the prosecution history of this application what structure or structures in the device disclosed in Rabin '799 the Examiner considers to be "fingers". The confusion regarding this interpretation by the Examiner has only been worsened by the Examiner's Answer.

The Examiner's Answer confuses what is very straightforward disclosure in Rabin '799 by stating that "... Rabin teaches a plurality of resilient fingers 12, 30, 32 ... ." (Examiner's Answer, page 4, line 17) and that "... the opposite ends of resilient fingers 30, 32 are coupled to the housing 20 by wing nuts 16, 18." (Examiner's Answer, page 4, lines 21-22).

In actuality, the *crosspiece 30* of Rabin '799 is connected to the *main frame 12* by the wing nut 18, and the *crosspiece 32* of Rabin '799 is connected to the *main frame 12* by the wing nut 16. The crosspieces 30 and 32 are *not* coupled to the housing 20.

Claim 1, for example, of the present application, in contrast to Rabin '799, recites a device comprising a plurality of fingers and an electric vibrator. Each of the fingers has a free end and an opposite end. The opposite ends of the fingers are coupled to the electric vibrator and the free ends of the fingers define an opening leading to a head-receiving space.

No such structure is shown in Rabin '799. If one were to read the Examiner's Answer instead of Rabin '799, it is conceivable that one would be under the impression that Rabin '799 *does* disclose such a structure.

The Examiner's Answer contains a statement that "[t]he portions of the fingers [of Rabin '799] opposite the free ends are coupled to the main frame 20." (Examiner's Answer, page 10, last line - page 11, line 1). This is a blatant misrepresentation of the disclosure in Rabin '799. The supporting frame 12 of Rabin '799 (which the Examiner confusingly refers to as "fingers") is a single element which extends from the wing nut 16 to the wing nut 18. The housing 20 (which the Examiner confusingly refers to as a "main frame 20" – element

12 is the main frame in Rabin '799) is integrally connected to the frame 12 about halfway between the respective ends of the frame 12 (Rabin '799, column 2, lines 62-65; Fig. 1).

The Examiner's Answer further contains a statement that "... the free ends of fingers 30, 32 are coupled to the frame 20 by wing nuts 16, 18." (Examiner's Answer, page 11, lines 2-3). This is yet another *false* statement. The crosspiece 30 and the crosspiece 32 are each single unitary structures which are attached, each at its centerpoint, not at an end, to the frame 12 (not the frame 20) by the wing nuts 16 and 18.

The Examiner's Answer contains a statement that "[i]f the ends of the fingers [of Rabin '799] contact the head of the user through the resilient pad it is not clear how appellant can disregard the teaching of Rabin." (Examiner's Answer, page 10, lines 8-9). The Examiner himself is acknowledging that the crosspieces 30 and 32 (which he without basis refers to as "fingers") do not contact the head of the user because pads are positioned between them and the head of the user, and then questions how the Applicant can assert that the crosspieces 30 and 32 do not contact the head of the user. The Applicant is not disregarding the teaching of Rabin '799; Rabin '799 discloses that the crosspieces 30 and 32, as well as the frame 12, do not have ends which contact the head of the user. In contrast, the claims recite:

- that the opposite ends of the fingers are coupled to the electric vibrator,
- that the free ends of the fingers define an opening leading to a head-receiving space, and
- that when the device is lowered onto the head of a user so that the head enters the head receiving space through the opening, the free ends of the fingers apply pressure to and massage the user's head.

III. There is no basis for the assertion in the Examiner's Answer that the head of a user of the device disclosed in Rabin '799 would be massaged "as the device is pressed onto the head"

As shown in Figure 8, when the device according to Rabin '799 is at rest, the frame 12 curls upon itself (Rabin '799, column 2, lines 51-54). Rabin '799 discloses that in order to use the massager disclosed therein, the user physically expands the scalp massager 10, stretching the frame 12 into an arc and placing the frame onto the user's head (Rabin '799, column 5, lines 1-5; column 2, lines 54-56). The Examiner's Answer contains an assertion that

[w]hen the Rabin device is to be placed on the head of the user, the ends of the fingers 30, 32 are expanded and placed on the head of the user and as the device is pressed onto the head the ends of the fingers would apply pressure to and massage the head of the user as the device is pressed onto the head.

(Examiner's Answer, page 4, last line - page 5, line 3). The actual disclosure in Rabin '799 contradicts these assertions by the Examiner. That is, Rabin '799 discloses that in order to use the massager, the user expands the massager and places the frame onto the user's head. Rabin '799 contains no suggestion that the massager of Rabin '799 is pressed onto the head of the user. The Examiner appears to be improperly envisioning using the device according to Rabin '799 in a manner which is as close as possible to being analogous to the way in which the device according to the present invention is disclosed as being used.

The Examiner's Answer further includes a statement that:

... Rabin does teach that the claimed finger shape with the free ends of the fingers defining an opening that is smaller than the head receiving space such that the ends of the fingers would apply pressure to the head and thus massage the head ... Figure 8 of Rabin clearly shows how the opening of the fingers is collapsed into a smaller configuration that the larger head receiving space above the opening.

(Examiner's Answer, page 9, lines 1-6). In the collapsed orientation shown in Fig. 8, the device of Rabin does not include fingers which define a head receiving space, and the device in that orientation could not be lowered onto a head so that the head enters a head receiving space and the free ends of the fingers apply pressure and massage the head. As discussed above, Rabin discloses that in order to use the massager, the user physically expands the massager, stretching the frame 12 into an arc and placing the frame onto a user's head (Rabin '799, column 5, lines 1-5; column 2, lines 54-56). Accordingly, while placing the frame onto a user's head, the ends of the frame 12 are pulled outward (whereby the device is no longer in the orientation shown in Fig. 8) so that they do not come into contact with the user's head and thus, when the device is lowered onto the user's head, the free ends of the frame 12 (as well as the crosspieces 30 and 32) do not apply pressure to the head. Finally, when the massager of Rabin '799 is placed on a user's head and the stretching force on the frame 12 is released, there is no longer a head receiving space (there is already a head inside the device), and the device could not be lowered onto a head.

Accordingly, Rabin '799 discloses three orientations, (1) the collapsed orientation, when the device is at rest, (2) the expanded orientation, during the time that the device is

being lowered onto (or, presumably, removed from) the head of the user, and (3) the as-worn orientation, where the device is on the head of a user. In the collapsed orientation, there is no head receiving space, as the space is not sufficiently large to receive a user's head. In the expanded orientation, there is no disclosure in Rabin '799 which indicates that the free ends of the fingers would apply pressure to the user's head. In the as-worn orientation, there is no head-receiving space, as the space between the fingers is already occupied by the user's head, and the device could not be lowered onto the head of a user until after it is removed from the first user, at which point the device would be in either the collapsed orientation or the expanded orientation.

IV. Rabin '799 does not disclose or suggest fingers which have a transversely extending portion immediately adjacent to a handle

The Examiner's Answer also includes a statement that "... the fingers [of Rabin '799] adjacent the vibrator 20 at 12 extend transversely immediately adjacent the vibrator handle portion 20 . . . The fact that the fingers curl up upon themselves is immaterial" (Examiner's Answer, page 11, lines 4-7).

Claim 15 recites a device which includes a plurality of fingers, a vibrator and a handle. Each finger has a free end and an opposite end. The vibrator is coupled to the opposite ends of the fingers. The handle receives the opposite ends of the fingers. Each of the fingers has (1) a transversely extending portion immediately adjacent the handle and (2) a contiguous portion.

As noted above, in Rabin '799, the frame 12 is a single unitary structure and does not have ends which are received in a handle, nor does it have transversely extending portions (i.e., portions which extend perpendicularly to a handle or to a portion of the frame 12 which is received in a handle).

- V. The Examiner is flagrantly ignoring U.S. law in basing a rejection on assertions that the device disclosed in U.S. Patent No. 5,611,771 (Taylor ‘771) *could be* bent so as to exhibit the claimed properties and *could be* used in such a way that other claimed properties would be satisfied

Similar to the rationale in other rejections, the Examiner uses the present applicant’s invention as a target and asserts:

[s]ince the free ends of fingers 16 [of Taylor ‘771] are intended to be bent inwardly toward the head they can be bent even further inward to define an opening that is smaller than the head receiving space. Due to the fact that the fingers are made of a material that allows the fingers the ability to bend to any position and retains the new position, one can bend the fingers such that they would define an opening that is smaller than the head receiving space. When the device is then pressed on the head of the user the free ends of the fingers 16 would contact and apply pressure to the head of the user expanding outwardly under the pressing forces to apply forces and thus massage the head. The Taylor device is capable of conforming to the shape claimed . . .

(Examiner’s Answer, page 5, lines 12-19). Taylor ‘771 does not disclose such bending the fingers 16 “even further inward.” This “bending even further inward” is imagined by the Examiner because the Examiner needs such disclosure to satisfy features recited in the claims.

Similarly, Taylor ‘771 does not disclose pressing the device disclosed therein onto the head of a user such that the free ends of the fingers 16 contact the head of the user while pressing the device onto the head of the user.

It is manifestly improper for the Examiner to base a rejection on assertions that the structure in the reference *could be* bent so as to satisfy claimed features and that the device *could be* used in such a way that it would satisfy other claimed features.

- VI. Taylor ‘771 does not disclose a device which includes fingers having a transversely extending portion immediately adjacent a handle

As noted above, claim 15 recites a device which includes a plurality of fingers, a vibrator and a handle. Each finger has a free end and an opposite end. The vibrator is coupled to the opposite ends of the fingers. The handle receives the opposite ends of the fingers. Each of the fingers has a transversely extending portion immediately adjacent the



handle and a contiguous portion.

The Examiner's Answer contains a statement that "... the opposite ends 43 of the fingers 16 [of Taylor '771] extend transversely to the longitudinal axis of the head of the user." (Examiner's Answer, page 12, lines 4-5). Claim 15 recites that the fingers each have a transversely extending portion immediately adjacent the handle, not that the fingers extend transversely to the longitudinal axis of the head of a user. It is respectfully submitted that claim 15 would be understood by those of skill in the art to require that each of the fingers extends into the handle, and adjacent to the handle, it forms a right angle with respect to the handle and/or with respect to the portion of that finger contained within the handle.

The Examiner's Answer further contains a statement that "[t]he headset of Taylor acts as a handle." (Examiner's Answer, page 12, lines 5-6). The Examiner's Answer contains no allegation that the headset of Taylor *receives* opposite ends of fingers as recited in claim 15. The opposite ends of the fingers 16 of Taylor '771 are received in the respective base members 43 and 43', not in a handle.

VII. It is improper for the Examiner to base a rejection on a modification of a prior art reference for which there is no suggestion in the applied references

The Examiner's Answer contains a statement that "[i]f the fingers of Erickson were modified to cover more of the person's head they would then curve inwardly to accommodate the shape of the head such as taught by Rabin '799." (Examiner's Answer, page 6, lines 5-6). Neither Rabin '799 nor Erickson '444 (U.S. Patent No. 2,113,444) contains any disclosure which would suggest that the design of the frame 12 and/or the crosspieces 30 and 32 of Rabin '799 would be suitable in any way on a device as disclosed in Erickson '444. Rabin '799 contains no disclosure which would suggest modifying the device according to Erickson '444 by extending the fingers 19 of Erickson '444 and bending them inward to define an opening having a circumference which is smaller than a circumference of a space defined within the fingers.

### VIII. Response to New Alleged Ground of Rejection

The Examiner's Answer contains an alleged new ground of rejection, namely, claims 1 - 4 and 6 - 33 are rejected under 35 U.S.C. 103(a) over Australian Design Patent AU-134633 (Lacey '633) in view of Rabin '799 or Blachly '990.

The Examiner's Answer contains a statement that "[a]s a result of a pending ReExamination proceeding on the parent application a new reference [Lacey '633] has come to the attention of the examiner." It is respectfully noted that Lacey '633 was cited in the present application in an Information Disclosure Statement filed on August 22, 2001 (i.e., the date that the present application was filed), and was acknowledged as having been considered by the U.S. PTO in an Office Action dated May 21, 2003. The statement that Lacey '633 has come to the attention of the Examiner as a result of the reexamination proceeding thus tells only part of the story – the rest of the story is that the U.S. PTO has been aware of Lacey '633 since the filing of the present application and has, until now, correctly not applied Lacey '633 in any rejection.

Lacey '633 does not disclose or suggest the inclusion of a vibrator coupled to the ends of the fingers which are opposite the free ends of the fingers. This feature is recited in claims 1, 7, 15, 23, 26 and 30 of the present application, i.e., each of the independent claims.

Also, Lacey '633 does not disclose that the opening defined by the free ends of the fingers has a circumference which is larger than the circumference of the head of the user. This feature is recited in claims 1, 7, 15, 23, 26 and 30 of the present application.

Similarly, Lacey '633 does not disclose or suggest that the space defined within the fingers is large enough to receive the head of the user, i.e., that the fingers define a head-receiving space. This feature is recited in claims 1, 7, 15, 23, 26 and 30 of the present application.

Likewise, Lacey '633 does not disclose or suggest that the dimensions of the fingers are such that when the device is lowered onto the head of the user, the free ends of the fingers will apply pressure to and thus massage the user's head. This feature is recited in claims 1, 7, 15, 23, 26 and 30 of the present application.

Also, Lacey '633 does not disclose or suggest that the free ends of the fingers terminate in a bulb or ball structure (claims 9, 18, 28 and 33 of the present application) or that the fingers are resilient (i.e., that they possess the ability to recover their size and shape after deformation—see the excerpt from *Webster's Ninth New Collegiate Dictionary*, Merriam-

Webster Inc., Massachusetts, 1990, attached hereto as Appendix A) (claims 1, 7, 15, 23, 26 and 30 of the present application).

The Examiner's Answer contains a statement that "[s]ince the Australian design patent is appellant's own patent on the same invention the overall design of the head massaging device has been disclosed to the public." (Examiner's Answer, page 7, lines 6-7). It appears that the Examiner's reasoning is that because the present inventor was also the inventor in the Australian design patent, the Australian design patent must disclose all of the features noted above as being recited in the present claims, even though the Australian design patent does not disclose or reasonably suggest those features. It is clearly improper for the Examiner to assert that the Australian design patent contains disclosure which is not contained in the design patent simply because the design patent and the present application name the same inventor.

The Examiner's Answer also includes a statement that "[t]he design patent discloses appellant's claimed relationship of the size of the opening formed by the free ends of the resilient fingers being smaller than the head receiving space (Examiner's Answer, page 7, lines 8-10). However, as noted above, the Australian design patent does not disclose that the space inside the fingers is a head receiving space or that it is large enough to receive a head. Attached as Appendix B is a photograph of a device which corresponds to Lacey '633 and which clearly does not have a head receiving space. Attached as Appendix C is a photograph of a device which corresponds to the present invention, including the provision of a head receiving space.

The Examiner's Answer contains statements that "[t]he same explanation given above in the rejection of Robbins in view of Rabin and Blachly would apply here as well" and that "[i]t would have been obvious to one of ordinary skill in the art to modify Lacey to include a vibrator as taught by Rabin or Blachly to enhance the massaging treatment of the head." (Examiner's Answer, page 7, lines 14-16).

Similar to the rejection over Robbins '980 in view of Rabin '799, neither Lacey '633 nor Rabin '799 discloses or suggests a device which includes a plurality of fingers which define a head-receiving space.

Blachly '990, like Lacey '633, does not disclose or suggest an arrangement of fingers in which the spacing between the fingers is large enough to define a head-receiving space.

Accordingly, no combination of Lacey '633 with Rabin '799 and/or Blachly '990 would render obvious the claimed device. Therefore, it is respectfully submitted that this

rejection is without merit and should be reversed.

For the foregoing reasons, in addition to the points made in the Brief on Appeal filed on December 27, 2004, it is respectfully requested that the Honorable Board of Patent Appeals and Interferences reverse the Final Rejection of claims 1-4 and 6-33, as well as the new rejection included in the Examiner's Answer, and pass this application to allowance and issuance.

The Commissioner is hereby authorized to charge any additional fees associated with this communication or credit any overpayment to Deposit Account No. 50-1446.

Respectfully submitted,



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## APPENDIX A



WEBSTER'S  
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**A GENUINE MERRIAM-WEBSTER**

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re-sid-ə-um \rɪ-ˈzɪd-ə-wəm/ *n*, *pl* re-sid-ə-ʊ-ə-wə [L] (1672) : something residual; *as* : a RESIDUE *b* : a residual product (as from the distillation of petroleum)

re-sign \rɪ-ˈzɪn/ *vb* [ME *resignar*, fr. MF *resigner*, fr. L *resignare*, lit. 'to unseal, cancel', fr. *re-* + *signare* to sign; seal — more at SIGN] *vi* (14c) : 1 : RELEGATE, CONSIGN; *esp* : to give (oneself) over without resistance (—ed herself to her fate) 2 : to give up deliberately; *esp* : to renounce (as a right or position) by a formal act ~ *vi* 1 : to give up one's office or position : QUIT 2 : to accept something as inevitable : SUBMIT *syn* see RELINQUISH, ABDICATE — re-sig-ned-ly \-zɪ-nəd-lē/ *adv* — re-sig-ned-ness \-zɪ-nəd-nəs/ *n* — re-sig-nér \-zɪ-nər/ *n*

re-sig-n \ˈrɪ-ˈzɪn/ *vi* (1805) : to sign again

re-sig-na-tion \ˌrez-ɪ-ŋə-ˈnā-shən/ *n* (14c) 1 : a : an act or instance of resigning something : SURRENDER *b* : a formal notification of resigning 2 : the quality or state of being resigned : SUBMISSIVENESS

re-sile \rɪ-ˈzɪ(ə)/ *vi* resiled; re-sil-ing [LL & L; LL *resilire* to withdraw, fr. L, to recoil] (1529) : RECOIL, RETRACT; *esp* : to return to a prior position

re-sil-i-ence \rɪ-ˈzɪl-ɪ-ən(t)s/ *n* (1824) 1 : the capability of a strained body to recover its size and shape after deformation caused *esp*. by compressive stress 2 : an ability to recover from or adjust easily to misfortune or change

re-sil-i-en-cy \-ən-sē/ *n* (1835) : RESILIENCE

re-sil-i-ent \-ɪ-ənt/ *adj* [L *resiliens*, *resiliens*, prp. of *resilire* to jump back, fr. *resilire*, *resilire* to leap — more at SALLY] (1674) : characterized or marked by resilience; *as* : capable of withstanding shock without permanent deformation or rupture *b* : tending to recover from or adjust easily to misfortune or change *syn* see ELASTIC — re-sil-i-ent-ly *adv*

res-in \ˈrez-ən/ *n* [ME, fr. MF *resine*, fr. L *resina*, fr. Gk *ῥηίνη* pine resin] (14c) 1 : a : any of various solid or semisolid amorphous fusible flammable natural organic substances that are usu. transparent or translucent and yellowish to brown, are formed *esp*. in plant secretions, are soluble in organic solvents (as ether) but not in water, are electrical nonconductors, and are used chiefly in varnishes, printing inks, plastics, and sizes and in medicine *b* : ROSIN 2 : a : any of a large class of synthetic products that have some of the physical properties of natural resins but are different chemically and are used chiefly in plastics *b* : any of various products made from a natural resin or a natural polymer

res-in *vt* res-ined; res-in-ing \ˈrez-ən-ɪŋ, ˈrez-nɪŋ/ (1865) : to treat with resin

res-in-ate \ˈrez-ən-ət/ *vt* -at-ed; -at-ing (ca. 1890) : to impregnate or flavor with resin

resin canal *n* (1884) : a tubular intercellular space in gymnosperms and some angiosperms that is lined with epithelial cells which secrete resin *called also* resin duct

res-in-ify \ˈrez-ən-ɪ-/ *vi* -fied; -fy-ing (1876) : to convert into or treat with resin

res-in-oid \ˈrez-ən-ɔɪd/ *n* (1880) 1 : a thermosetting synthetic resin 2 : GUM RESIN

res-in-ous \ˈrez-nəs, -n-əs/ *adj* (1646) : of, relating to, resembling, containing, or derived from resin

re-sist \rɪ-ˈzɪst/ *vb* [ME *resistere*, fr. MF or L; MF *resister*, fr. L *resistere*, fr. *re-* + *sistere* to take a stand; akin to L *stare* to stand — more at STAND] *vi* (14c) : to exert force in opposition ~ *vi* 1 : to exert oneself so as to counteract or defeat 2 : to withstand the force or effect of *syn* see OPPOSE

res-ist *n* (1836) : something (as a coating) that protects against a chemical, electrical, or physical action

res-ist-ance \rɪ-ˈzɪs-tən(t)s/ *n*, (15c) 1 : an act or instance of resisting : OPPOSITION *b* : a means of resisting 2 : the ability to resist; *esp* : the inherent capacity of a living being to resist untoward circumstances (as disease, malnutrition, or toxic agents) 3 : an opposing or retarding force 4 : the opposition offered by a body or substance to the passage through it of a steady electric current *b* : a source of resistance 5 *often cap.* : an underground organization of a conquered country engaging in sabotage and secret operations against occupation forces and an abettor of such operations

re-sis-tant \-tənt/ *n* (1600) : one that resists : RESISTER

res-istant *adj* (1610) : giving or capable of resistance — often used in combination (wrinkle-resistant clothes)

re-sist-er \rɪ-ˈzɪs-tər/ *n* (14c) : one that resists; *esp* : one who actively opposes the policies of a government

re-sist-ib-ility \rɪ-ˈzɪs-tə-bəl-ə-ti/ *n* (1617) 1 : the quality or state of being resistible 2 : ability to resist

re-sist-ible \rɪ-ˈzɪs-tə-bəl/ *adj* (1608) : capable of being resisted

re-sis-tive \rɪ-ˈzɪs-tɪv/ *adj* (1603) : marked by resistance — often used in combination (fire-resistive material) — re-sis-tive-ly *adv* — re-sis-tive-ness *n*

re-sis-tiv-ity \rɪ-ˈzɪs-tɪv-ə-ti/ *n*, *pl* -ties (1885) 1 : the longitudinal electrical resistance of a uniform rod of unit length and unit cross-sectional area : the reciprocal of conductivity 2 : capacity for resisting : RESISTANCE

re-sist-less \rɪ-ˈzɪst-ləs/ *adj* (1586) 1 : IRRESISTIBLE 2 : offering no resistance — re-sist-less-ly *adv* — re-sist-less-ness *n*

re-sis-tor \rɪ-ˈzɪs-tər/ *n* (1905) : a device that has electrical resistance and that is used in an electric circuit for protection, operation, or current control

re-sit \ˈrɪ-sɪt/ *vi* (1661) : a sitting (as of a legislature) for a second time : another sitting

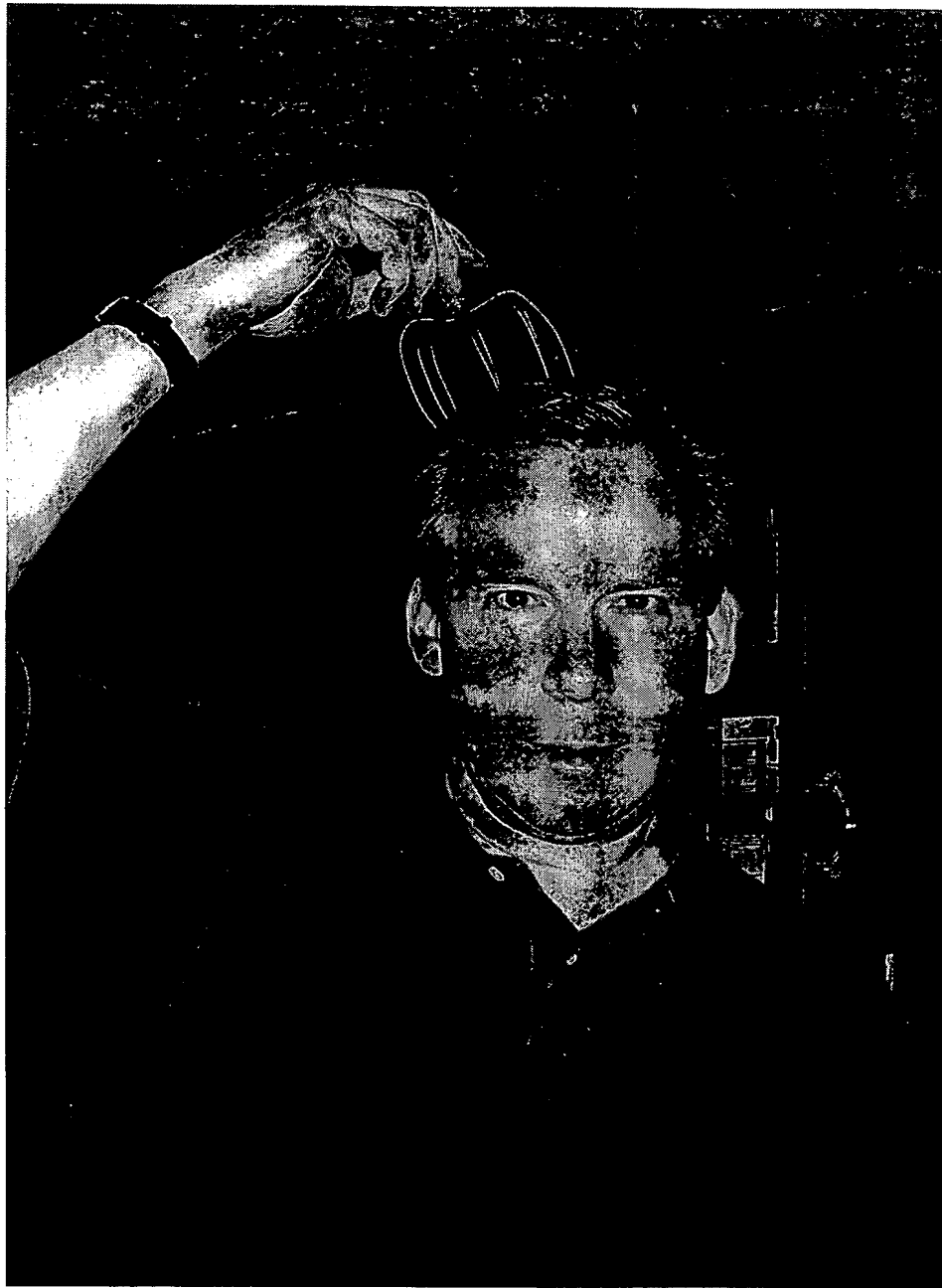
res-jud-ic-a-ta \ˈrez-juɪd-ɪ-kā-tə/ *n* [L, judged matter] (1693) : a matter finally decided on its merits by a court having competent jurisdiction and not subject to litigation again between the same parties

re-sole \ˈrɪ-ˈsɔl/ *vi* (1853) : to furnish (a shoe) with a new sole ~ *vi* : to resole a shoe

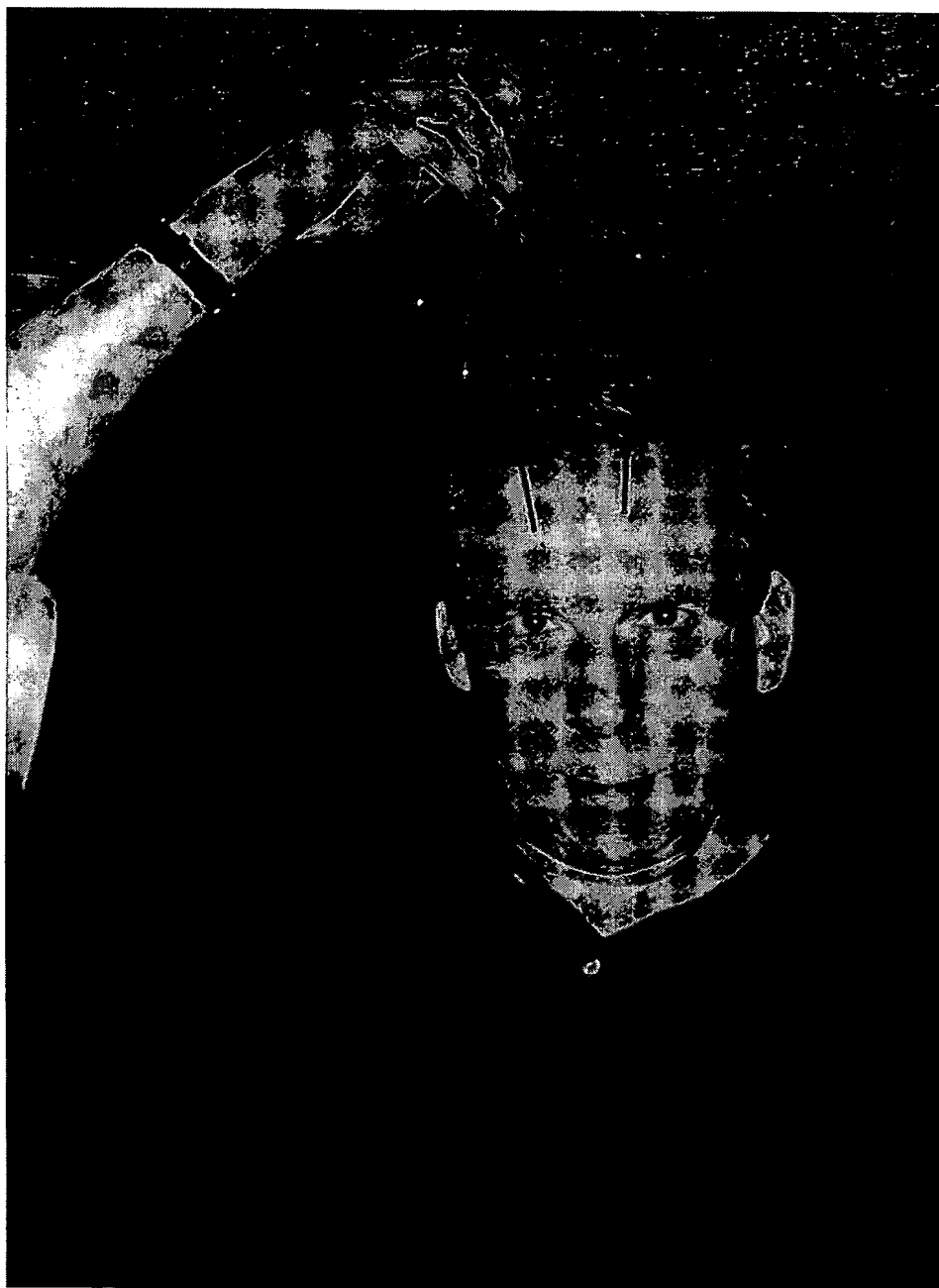
|ə| abut |ʔ| kitten, F table |ər| further |ə| ash |ā| ace |ā| cot, cart  
 |aʊ| out |ch| chin |e| bet |ē| easy |ə| go |i| hit |ī| ice |i| job  
 |ŋ| sing |ō| go |ō| law |oi| boy |th| thin |th| the |ū| loot |ū| foot  
 |y| yet |zh| vision |ā, k, ŋ, œ, ʊ, ū, ʏ| see Guide to Pronunciation



## APPENDIX B



## APPENDIX C



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